MASTER
NEGATIVE
NO. 91-80414-1

MICROFILMED 1991

COLUMBIA UNIVERSITY LIBRARIES/NEW YORK

as part of the
"Foundations of Western Civilization Preservation Project"

Funded by the
NATIONAL ENDOWMENT FOR THE HUMANITIES

Reproductions may not be made without permission from
Columbia University Library

COPYRIGHT STATEMENT

The copyright law of the United States -- Title 17, United States Code -- concerns the making of photocopies or other reproductions of copyrighted material...

Columbia University Library reserves the right to refuse to accept a copy order if, in its judgement, fulfillment of the order would involve violation of the copyright law.

AUTHOR: WOODBRIDGE, FREDERICK J. E.

TITLE: METAPHYSICS

PLACE: NEW YORK

DATE: 1908

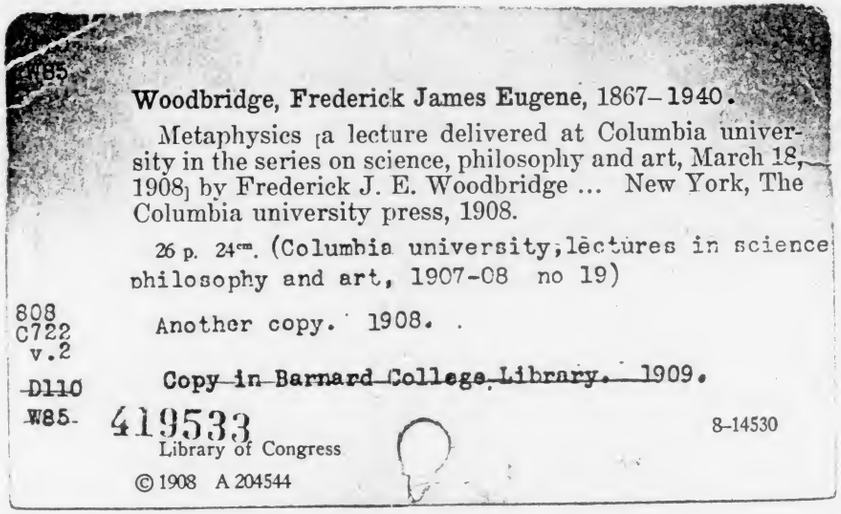
Master Negative #

91-80414-1

COLUMBIA UNIVERSITY LIBRARIES
PRESERVATION DEPARTMENT

BIBLIOGRAPHIC MICROFORM TARGET

Original Material as Filmed - Existing Bibliographic Record



Woodbridge, Frederick James Eugene, 1867–1940.

Metaphysics [a lecture delivered at Columbia university in the series on science, philosophy and art, March 18, 1908] by Frederick J. E. Woodbridge ... New York, The Columbia university press, 1908.

26 p. 24cm. (Columbia university, lectures in science philosophy and art, 1907-08 no 19)

Another copy. 1908.

Copy in Barnard College Library. 1909.

808
C722
v.2

D110
W85

419533
Library of Congress

8-14530

© 1908 A 204544

Restrictions on Use:

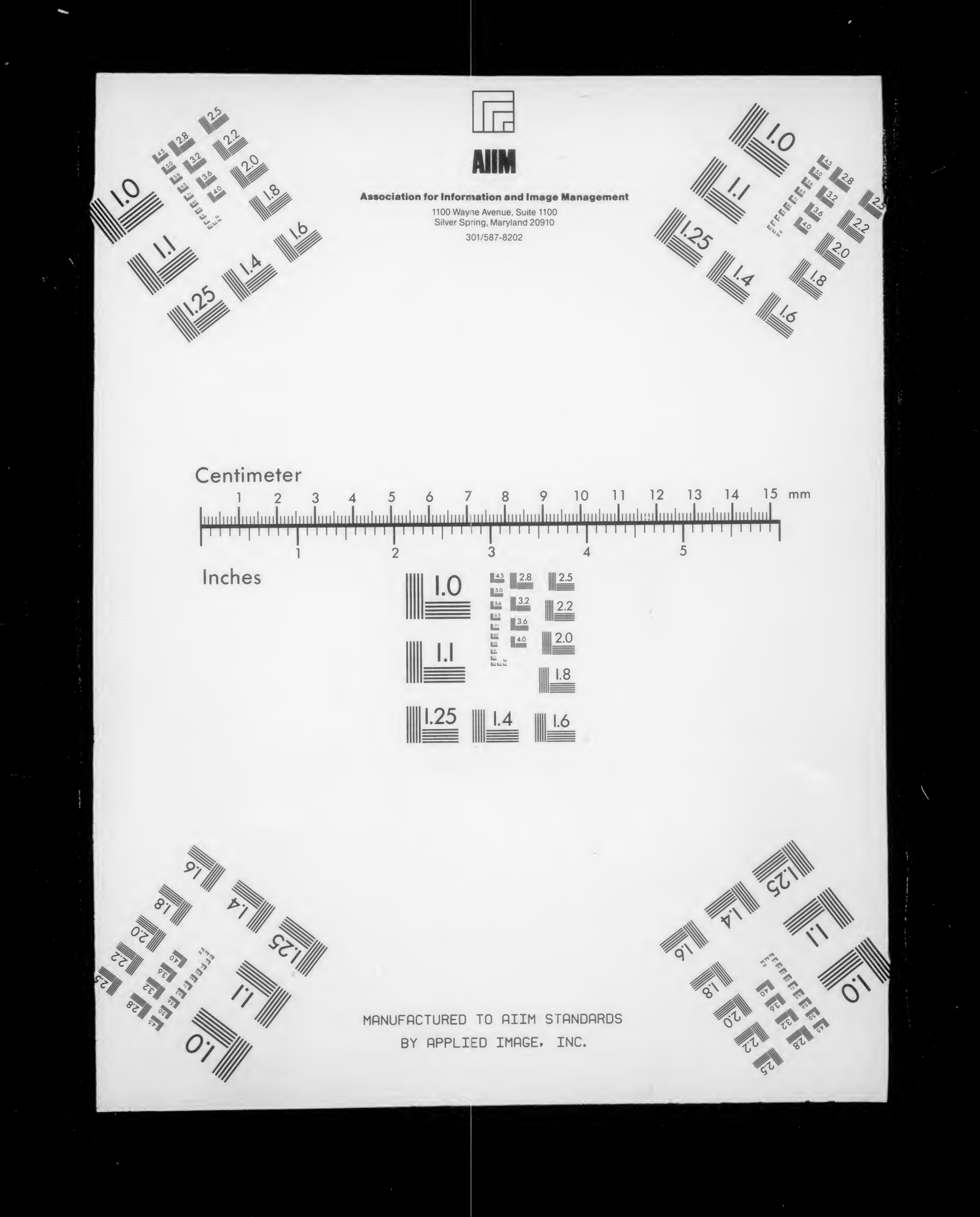
TECHNICAL MICROFORM DATA

FILM SIZE: 35mm REDUCTION RATIO: 11

IMAGE PLACEMENT: IA (IIA) IB IIB

DATE FILMED: 1-9-92 INITIALS M.B.

FILMED BY: RESEARCH PUBLICATIONS, INC WOODBRIDGE, CT


AIIM
Association for Information and Image Management
1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202
Centimeter
Inches
MANUFACTURED TO AIIM STANDARDS
BY APPLIED IMAGE, INC.

O
85

Columbia University
in the City of New York

THE LIBRARIES

110 W85

Columbia University
in the City of New York

LIBRARY

METAPHYSICS

BY

FREDERICK J. E. WOODBRIDGE

JOHNSONIAN PROFESSOR OF PHILOSOPHY
COLUMBIA UNIVERSITY

New York
THE COLUMBIA UNIVERSITY PRESS
1908

METAPHYSICS

A LECTURE DELIVERED AT COLUMBIA UNIVERSITY
IN THE SERIES ON SCIENCE, PHILOSOPHY AND ART
MARCH 18, 1908

METAPHYSICS

BY

FREDERICK J. E. WOODBRIDGE

JOHNSONIAN PROFESSOR OF PHILOSOPHY
COLUMBIA UNIVERSITY

New York
THE COLUMBIA UNIVERSITY PRESS
1908

COLUMBIA UNIVERSITY LIBRARY

COPYRIGHT, 1908,
BY THE COLUMBIA UNIVERSITY PRESS.

Set up, and published April, 1908.

110
S8M

COLUMBIA
UNIVERSITY
LIBRARY

METAPHYSICS

THE first book to bear the title "Metaphysics" is attributed to Aristotle. If the title described or suggested the contents of the book, there might have been less confusion regarding the nature of the science. To some, however, it means the mysterious, to others, the exceptionally profound; while still others see in it an occasion for mirth. There have been, consequently, many definitions of metaphysics. The Century Dictionary gives, among others, the following: "The doctrine of first principles"; "Supernatural science; the doctrine of that which transcends all human experience"; "The science of the mind treated by means of introspection and analysis, and not by experiment and scientific observation"; "Any doctrine based upon presumption and not upon inductive reasoning and observation"; "An abstract and abstruse body of doctrine supposed to be virtually taken for granted in some science"; "Used frequently with the definite article, and generally connected with unpleasant associations, as being a study very dry and at the same time of doubtful truth." To these definitions might be added that by Professor James: "An unusually obstinate attempt to think clearly and consistently."

Such variety of definition is largely due to the fact that the title given to Aristotle's book was an unfortunate choice. It appears to indicate that when you have finished your physics, the science which was originally thought to embrace nature, you must then pass beyond physics and

417814

somehow cut loose from nature herself. After physics, metaphysics; after nature, the supernatural—that is an invitation at once to titanic effort and to Icarian folly. Metaphysics came to suggest such human possibilities. Originally, however, the term represented no more than the happy thought of an enterprising editor. For, we are told, Andronicus of Rhodes, in the first century B. C., finding among the works of Aristotle a number of loosely connected writings which the great Greek had neglected to name, placed these writings after the books on physics, and named them accordingly, *τὰ μετὰ τὰ φυσικά*, the books which come after the books on physics. A name which thus indicated only an editorial arrangement became the name of a department of knowledge. That is not the only time when an editor's happy thought has been the cause of mischief.

If, however, we turn from the inspiring title to the writings themselves, illusions about the supernatural character of metaphysics tend to disappear. "There is," so we are told by the Stagirite, "a science which investigates existence as existence and whatever belongs to existence as such. It is identical with none of the sciences which are defined less generally. For none of these professedly considers existence as existence, but each, restricting itself to some aspect of it, investigates the general aspect only incidentally, as do the mathematical sciences." The emphasis is thus put by Aristotle on fact and on nature, but it is put on fact and nature as we attempt to view them with at once the least and with the greatest restriction: with the least restriction, because we are invited to view nature in the light of her most comprehensive characters; with the greatest restriction, because we are invited to view her stripped of her wonderful diversity.

In thus conceiving a science whose distinguishing mark should be that it applies to all existence, Aristotle noted a

fact which the history of intellectual progress has abundantly illustrated, the fact, namely, that knowledge grows in extent and richness only through specialization. Nature herself is a specialized matter. She does things by producing differences, individuals, variations. To grasp this variety, a variety of sciences is necessary. Indeed, as Aristotle estimates the achievements of his predecessors, he finds the source of their confusion, inadequacy, and limitation to lie in their habit of regarding each his own special science as a sufficient account of the cosmos. What they said may have been true under the restrictions which their limited field imposed upon their utterance; but it became false when it was transferred to other fields differently limited. Following his own illustrations we may say, for instance, that the Pythagoreans were quite right in trying to formulate the undoubted numerical relations which obtain in nature; but they were quite wrong if they conceived arithmetic to be an adequate astronomy. The soul may be a harmony of the body and thus capable of numerical expression, but to think one has exhausted its nature by defining it as a moving number is to forget the natural limitations of inquiry and to make a rhetorical phrase the substitute for scientific insight. We may properly speak of a sick soul as out of tune, but we should not thereby become either psychologists or physicians. No; knowledge is a matter of special sciences, each growing sanely as it clearly recognizes the particular and specialized aspect of nature with which it deals, but becoming confused when it forgets that it is one of many. Accordingly what we call the philosophy of Aristotle is not a single science to be described by a picturesque or a provoking name, but a system of sciences the members of which should be related to one another in the way nature rather than desire permits.

If knowledge increases thus through limitation, restriction, and specialization, if science grows through the mul-

tiplication of different sciences, must our final view of nature reveal her as a parceled and disjointed thing? Is the desire to say something about the universe as a whole which may none the less be true of it, is that desire without warrant, something utterly to be condemned? Not, thought Aristotle, if that desire is checked and controlled by fact. We should indeed err if we thought to attain unity through any artificial combination of special truths, or by attempting so to reduce the diversity of the sciences that their individual differences should disappear. Yet we may approach unity through the same method by which the special sciences gain their individual coherence and stability, that is, by limitation and restriction of field. All things somehow exist; and because they so obviously do, we can never lose sight of the fact that existence itself is a problem irrespective of the fact whether a particular existence is that of a stone, a man, or a god. Particular existences may carry us at last to some exclusive and inalienable core of individuality, hidden somewhere and possibly discoverable, but existence itself is possessed by nothing exclusively. It is rather the common feature of everything that can be investigated, and as such is something to be looked into. Whether such looking is fruitful is a question not to be prejudiced. The fruitfulness of the inquiry depends upon the discovery whether existence as such has anything to reveal. We thus return to Aristotle's conception of a science of existence as existence, a specialized and restricted science, doing its own work and not that of the mathematician or the physicist or the biologist, or of any other investigator, a science which should take its place in that system of sciences the aim of which is to reveal to us with growing clearness the world in which we live. It was that science which Andronicus of Rhodes called "Metaphysics," baptizing it in the name of ambiguity, confusion, and idiosyncrasy.

For me it would be a congenial task to devote the remainder of this lecture to a detailed exposition of the metaphysics of Aristotle. It would be the more congenial, since the lecturer on history, by making the ancients our contemporaries, has saved enthusiasm for the Stagirite from being condemned as a mere anachronism. To call Aristotle, as Dante is supposed to have done, the master of them that know, even if they know no less than others, is still a privilege in the twentieth century. And this privilege is the one *ad hominem* argument in justification of the study of metaphysics which I would venture to suggest to an audience already made somewhat familiar with the inadequacies and limitations of human knowledge. As the congenial, however, may not be the appropriate, I proceed to sketch the general bearings of metaphysics, pointing out how, beginning with analysis and description, it tends to become speculative, and to construct systems of metaphysics which aim at complete conceptions of the universe and have a certain relevancy to science, morals, and religion. Then I will indicate how metaphysics, influenced by modern idealistic speculation, became arrogant as a theory of knowledge, and how there are present signs of its return to its ancient place as a science coördinated with the rest of knowledge. In concluding, I will consider how, with this return, it finds a new interest in the interpretation of the process of evolution.

Either because Aristotle developed his science of existence with so much skill or because the science is to be reckoned, as he reckoned it, among those intellectual performances which are excellent, its unfortunate name has never completely obscured its professed aims and restrictions. Too often, indeed, metaphysics has been made the refuge of ignorance, and inquirers in other fields have been too ready to bestow upon it their own unsolved problems and inconsistencies. Many have thus been led to refuse

discussion of certain difficulties for the reason that they are metaphysical, a reason which may indicate that one is tired rather than that one is wise. It has even been suggested that so long as problems are unsolved they are metaphysical. Even so, the study, on account of the comprehensiveness thus given to it, might advance itself, imposing and commanding, a guarantor of intellectual modesty. Yet metaphysicians, as a rule, have not regarded their work as that of salvation. They have viewed their problems as the result of reflection rather than of emergency. And their reflection has ever seized upon the fact that nature's great and manifold diversities do, none the less, in spite of that diversity, consent to exist together in some sort of union, and that, consequently, some understanding of that unity is a thing to attempt. Metaphysics, therefore, may still adopt the definition and limitations set for it by Aristotle. We may, indeed, define it in other terms, calling it, for instance, the science of reality, but our altered words still point out that metaphysical interest is in the world as a world of connected things, a world with a general character in addition to those specific characters which give it its variety and make many sciences necessary for its comprehension.

The term "reality," however, is intellectually agile. It tends to play tricks with one's prejudices and to lead desire on a merry chase. For to denominate anything real is usually to import a distinction, and to consign, thereby, something else to the region of appearance. Could we keep the region of appearance from becoming populated, it might remain nothing more than the natural negative implication of a region of positive interest. But reality, once a king, makes many exiles who crave and seek citizenship in the land from which they have been banished. The term "reality," therefore, should inspire caution instead of confidence in metaphysics—a lesson which history has

abundantly illustrated, but which man is slow to learn. Contrast those imposing products of human fancy which we call materialism and idealism, each relegating the other to the region of appearance, and what are they at bottom but an exalted prejudice for matter and an exalted prejudice for mind? And had not their conflict been spectacular, as armies with banners, what a pitiable spectacle it would have presented, since a child's first thought destroys the one, and every smallest grain of sand the other? No; everything is somehow real; and to make distinctions within that realm demands caution and hesitation.

Thus it is that the concept of reality has become an important theme in a great part of metaphysical inquiry, and that a keen appreciation of its varieties is essential to the historian of metaphysics. That science has been thought to suffer from a too close scrutiny into the idiosyncrasies of its past; but being somewhat ancient and robust, and, withal, decidedly human, it may consult the reflection that more youthful sciences have not always walked in wisdom's path, and so bear its own exposure with some consequent consolation. Yet what it has to reveal in the light of the shifting concept of reality is significant indeed. For we have come to learn that to call anything real exclusively, is to imply a preference, and that preference is largely a matter of the time in which it is born. It reflects an age, an occasion, a society, a moral, intellectual, or economic condition. It does not reflect an absolute position which knows no wavering. For me, just now, metaphysics is the most real thing imaginable, more real than chemistry or the stock exchange. In displaying some enthusiasm for it, I care not if the elements revert to ether or how the market goes. To be invited just now to consider the periodic law or the latest market quotations, would irritate me. An altered situation would find me, doubtless, possessed of an altered preference, indifferent

no longer to another science or to the Street. So much does occasion determine preference, and preference reality.

The historical oppositions in metaphysics present themselves, therefore, not as a mass of conflicting and contradictory opinions about the absolutely real, but as a too exclusive championship of what their exponents have believed to be most important for their times. In such metaphysicians the enthusiasm of the prophet has outrun the disinterestedness of the scientist. We may describe them as men of restricted vision, but we may not, therefore, conclude that their vision was not acute. Plato was not an idle dreamer, assigning to unreality the bed on which you sleep in order that he might convince you that the only genuinely real bed is the archetype in the mind of God, the ideal bed of which all others are shadows. Undoubtedly he converses thus about beds in his "Republic," but he does not advise you, as a consequence, to go to sleep in heaven. He tells you, rather, that justice is a social matter which you can never adequately administer so long as your attention is fixed solely on individual concerns. You must seek to grasp justice as a principle, in the light of which the different parts of the body politic may find their most fruitful interplay and coördination. His metaphysics of the ideal was born of Athens' need, but his dialogues remain instructive reading for the modern man. We may confound him by pointing out the obvious fact that men, not principles, make society, and yet accept his teaching that men without principles make a bad society, exalting principles thus to the position of the eminently real.

Similarly, he who reads Fichte's "Science of Knowledge" should not forget that Fichte spoke to the German people, calling them a nation. And the response he met must have seemed, in his eyes, no small justification of his view that reality is essentially a self-imposed moral task. And Spencer, influenced by social and economic reorganization and consolidation, could force the universe into a formula and think that he had said the final word about reality. Thus any exclusive conception of reality is rendered great, not by its finality for all times, but by its historical appropriateness.

Such questions, therefore, as, What is real? Is there any reality at all? Is not everything illusion, or at least part of everything? and such statements as, Only the good is real, Only matter is real, Only mind is real, Only energy is real, are questions and statements to be asked and made only by persons with a mission. For reality means either everything whatsoever or that a distinction has been made, a distinction which indicates not a difference in the fact of existence, but a difference in point of view, in value, in preference, in relative importance for some desire or choice. Yet it is doubtless the business of metaphysics to undertake an examination and definition of the different points of view from which those questions can be asked and those statements made. Indeed, that undertaking may well be regarded as one of the most important in metaphysics. The outcome of it is not a superficial doctrine of the relativity of the real, with the accompanying advice that each of us select his own reality and act accordingly. Nor is it the doctrine that since nothing or everything is absolutely real, there is no solid basis for conduct and no abiding hope for man. That individualism which is willful and that kind of agnosticism which is not intellectual reserve, but which is intellectual complacency, have no warrant in metaphysics. On the contrary, the doctrine of metaphysics is much more obvious and much more sane. It is that existence, taken comprehensively, is an affair of distinctions; that existence is shot through and through with variety.

But this is not all. Metaphysics discovers in the fact of variety a reason for the world's onward movement. For

a world without variety would be a world eternally still, unchanged and unchanging through all the stretches of time. We might endow such a world with unlimited power, capable, if once aroused, of a marvelous reaction; but unless there existed somewhere within it a difference, no tremor of excitement would ever disturb its endless slumber. All the sciences teach this doctrine. Even logic and mathematics, the most static of them all, require variables, if their formulations are to have any significance or application. Knowledge thus reflects the basal structure of things. And in this fact that differences are fundamental in the constitution of our world, we discover the reason why all those systems of metaphysics eventually fail which attempt to reduce all existence to a single type of reality devoid of variety in its internal make-up.

The variety in our world involves a further doctrine. While all varieties as such are equally real, they are not all equally effective. They make different sorts of differences, and introduce, thereby, intensive and qualitative distinctions. The onward movement of the world is thus, not simply successive change, but a genuine development or evolution. It creates a past the contents of which must forever remain what they were, but it proposes a future where variety may still exercise its difference-making function. And that is why we human beings, acting our part in some cosmic comedy or tragedy, may not be indifferent to our performance or to the preferences we exalt. The future makes us all reformers, inviting us to meddle with the world, to use it and change it for our ends. The invitation is genuine and made in good faith, for all man's folly is not yet sufficient to prove it insincere. That is why it has been easy to believe that God once said to man: "Be fruitful and multiply, and replenish the earth, and subdue it; and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth

upon the earth." That is why, also, willful individualism and complacent agnosticism have no warrant in metaphysics. Since all things are equally real, but all not equally important, the world's evolution presents itself as a drift towards results, as something purposeful and intended. While we may not invoke design to explain this relative importance of things, the world's trend puts us under the natural obligation of discovering how it may be controlled, and enforces the obligation with obvious penalties. Thus willfulness receives natural punishment and the universe never accepts ignorance as an excuse.

It seems difficult, therefore, not to describe evolution as a moral process. By that I do not mean that nature is especially careful about the kinds of things she does or that she is true and just in all her dealings. But evolution is movement controlled by the relative importance of things. We consequently find such terms as "struggle," "survival," "adaptation," useful in the description of it. And although these terms may appear more appropriate to the development of living things than to that of inorganic nature, we may not overlook the fact that the physical world also begets varieties and has its character determined by their relative importance.

Thus it is that the metaphysical doctrine of final causes appears to be fundamentally sound. It is easy to render it ridiculous by supposing that things were once made on purpose to exhibit the features and manners of action which we now discover in them, or by conceiving adaptation as an efficient cause of events, as if the fact that we see were the reason why we have eyes. So conceived the doctrine of final causes is justly condemned. On the other hand, however, how superficial is the opinion that in nature there is entire indifference to results, and that there are no natural goods! To-day is not simply yesterday rearranged or twenty-four hours added to a capricious time; it is

yesterday reorganized, with yesterday's results carried on and intensified. So that we might say that nature, having accidentally discovered that the distinction between light and darkness is a natural good, stuck to the business of making eyes. We should thus express a natural truth, but should not thereby free ourselves from the obligation of discovering how nature had achieved so noteworthy a result. That obligation the doctrine of final causes most evidently does not discharge, because final causes have never been found adequate to reveal the method of nature's working. Again and again, some investigator, impressed by the undoubted fact of nature's continuity, by her carefulness of the type, by her preservation of forms, by that character of hers which we can properly describe only by calling it preferential or moral, impressed by these things he has attempted to turn them into efficient causes, factors operative in the mechanism of the world. And he has repeatedly failed. It is, consequently, not prejudice which leads many students of nature's processes to insist that these are ultimately what we call mechanical. It is metaphysical insight. Yet that insight may readily degenerate into the most superficial philosophy, if it leads us to forget that mechanism is the means by which the ends of nature are reached. For nature undoubtedly exists for what she accomplishes, and it is that fact which gives to mechanism its relevancy, its importance, and its high value. Thus metaphysics, true to its early formulations, finds the world to be both mechanical and teleological, both a quantitative relation of parts and a qualitative realization of goods. Some indication that this finding is correct may be discovered in our instinctive recognition that nature is appropriately described both in the formulations of science and in the expressions of poetry.

Metaphysical analysis tends thus to disclose existence as

a process motived by the variety of its factors, as an evolution characterized, not by indifference, but by selection based on the relative importance of its factors for the maintenance of natural goods, as a development executed through an elaborate mechanism. It is natural that metaphysics should become speculative and attempt the construction of a system of things wherein its obvious disclosures may be envisaged with coherence and simplicity, and thus be rationally comprehended and explained. It is in such attempts that metaphysics has historically scored its greatest successes and its greatest failures. The lesson to be derived from a survey of them is, doubtless, one of grave caution, but it would be idle to affirm that we have seen the last of great systems of metaphysics. Democritus, Plato, Aristotle, Bruno, Descartes, Hobbes, Spinoza, Newton, Leibnitz, Berkeley, Kant, Laplace, Hegel, Spencer—to mention only the greatest names—each has had his system of the world which still has power to affect the thought and lives of men. System is beloved of man's imagination and his mind is restless in the presence of unconnected and unsupported details. He will see things *sub specie æternitatis* even while time counts out his sands of life. It is a habit begotten of nature, to be neither justified nor condemned. It would be absurd, consequently, to regard any system of metaphysics as absolutely true, but it would be more absurd to refuse to make one on that account. For such systems constitute the supreme attempts of intelligence at integration. They propose to tell us what our world would be like if our present restricted knowledge were adequate for its complete exposition. They are not, therefore, to be abandoned because they are always inadequate, incomplete, and provisional; they are rather to be pursued, because, when constructed by the wise, they are always ennobling and minister faithfully to the freedom of the mind.

Protests against metaphysical systems are, consequently, apt to be proofs of an impatient temper rather than of sound judgment. Yet such systems often grow arrogant, and become, thereby, objects of justified suspicion. Being the crowning enterprise of intelligence, to be worn, one might say, as an indication of a certain nobility of mind, they forfeit the claim to be thus highly regarded if they are made the essential preliminaries of wisdom. Yet the too eager and the too stupid have often claimed that the only possible foundation for the truth and value of science, and the only possible warrant for morality and human aspiration, are to be found in a system of metaphysics. If such a claim meant only that with a perfect system, could we attain it, would riddles all be solved and life's darkness made supremely clear, it would express an obvious truth. But made with the intent of laying metaphysics down as the foundation of science, of morality, and of religion, it is obviously false and iniquitous. In our enthusiasm we may indeed speak of metaphysics as the queen of all the sciences, but she can wear the title only if her behavior is queenly; she forfeits it when, ceasing to reign, she stoops to rule.

Yet there is justice in the notion that metaphysics, especially in its systematic shape, should contribute to the value of science, and be a source of moral and religious enlightenment. Its greatest ally is logic. In the systematic attempt to reduce to order the business of getting and evaluating knowledge, in distinguishing fruitful from fruitless methods, and, above all, in attempting to disclose the sort of conquest knowledge makes over the world, the aims and achievements of science should become better appreciated and understood. It is still true, as Heraclitus of old remarked, that much information does not make a man wise, but wisdom is intelligent understanding.

The disclosures of metaphysics are equally significant

for ethics. The great systems have usually eventuated in a theory of morals. And this is natural. Metaphysics, disclosing the fact that behavior is a primary feature of things, raises inevitably the question of how to behave effectively and well. Emphasizing the relative importance of the factors of evolution, it encourages the repeated valuation of human goods. It can make no man moral, nor give him a rule to guide him infallibly in his choices and acts; but it can impress upon him the fact that he is under a supreme obligation, that of living a life controlled, not by passion, but by reason, and of making his knowledge contribute to the well-being of society. It will still preach its ancient moral lesson, that since with intelligence has arisen some comprehension of the world, the world is best improved, not by passions or by parties, not by governments or by sects, but by the persistent operation of intelligence itself.

After a somewhat similar manner, metaphysics in its systematic character has significance for theology. To speak of existence as a riddle is natural, because so much of its import can be only guessed. That it has import, most men suspect, and that this import is due to superior beings or powers is the conviction of those who are religious. Metaphysics is seldom indifferent to such suspicions and convictions. As it has a lively sense of the unity of things, it is led to seek ultimate reasons for the world's stability. And as it deals with such conceptions as "the infinite" and "the absolute," it has a certain linguistic sympathy with faith. Consequently, while it has never made a religion, it has been used as an apology for many. This fact witnesses, no doubt, more profoundly to the adaptability of metaphysics than it does to the finality of the ideas it has been used to sustain. Yet metaphysics, tending to keep men ever close to the sources of life, fosters a whole-hearted acceptance of life's responsibilities and

duties. It is thus the friend of natural piety. And in superimposing upon piety systematic reflection on what we call the divine, it follows a natural instinct, and seeks to round out man's conception of the universe as the source of his being, the place of his sojourning, the begettor of his impulses and his hopes, and the final treasury of what he has been and accomplished.

Such, then, are the general nature and scope of metaphysical inquiry. With Aristotle we may define metaphysics as the science of existence and distinguish it from other departments of knowledge by its generality and its lack of attention to those specific features of existence which make many sciences an intellectual necessity. Existence, considered generally, presents itself as an affair of connected varieties and, consequently, as an onward movement. Because the varieties have not all the same efficacy, the movement presents those selective and moral characters which we ascribe to a development or evolution. While the efficient causes of this evolution appear to be mechanical, the mechanism results in the production of natural goods, and thus justifies a doctrine of final causes. Upon such considerations metaphysics may superimpose speculative reflection, and attempt to attain a unified system of the world. It may also attempt to evaluate science in terms of logical theory, to enlarge morality through a theory of ethics, and to interpret natural piety and religion in terms of theological conceptions. Metaphysics proposes thus both an analysis and a theory of existence; it is descriptive and it is systematic. If metaphysicians often forget that theory is not analysis, that system is not description, it is not because they are metaphysicians, but because they are human. For my part, therefore, I do not see why they should not be allowed to entertain at least as many absurdities as the average reflective inquirer. Greater indulgence is neither desired nor necessary. And while meta-

physicians may be hard to understand, they do not like to be misunderstood. So I emphasize again the fact that it appears to be the greatest abuse of metaphysical theories to use them to justify natural excellence or to condone natural folly. It is their business to help to clarify existence. It is not their business to constitute an apology for our prejudices or for our desires.

In regarding metaphysics as the outcome of reflection on existence in general, and, consequently, as a department of natural knowledge, I have supposed that intelligent persons could undertake such reflection and accomplish something of interest and consequence, by following the ordinary experimental methods of observation and tested generalization. I have stated that the contrast between metaphysics and other departments of knowledge arises from its emphasis on generalities and their emphasis on particulars. In doing all this I have followed ancient tradition. But much of modern philosophy has emphatically declared that such an attitude is decidedly too naïve. Keenly alive to the fact, which it credits itself with discovering, the fact, namely, that the world into which we inquire exists for us only as the mind's object, that philosophy has insisted that the mind is central in the universe, and that the nature and laws of mind are, therefore, the determining factors in the structure of the world we know.

Of this view Kant was the great systematic expounder. It was he who taught that space and time are but the forms of sense perception. It was he who declared that the basal principles of physics are but derivatives of the principles of the mind. It was he who affirmed that by virtue of our understanding we do not discover the laws of nature, but impose them. He consequently drew the conclusion that we know only the appearances of things connected according to the laws of the mind, but never the things them-

selves connected according to their own laws. The moral he drew pointed in the direction of intellectual modesty and an enlightened reliance on experience. But to make nature nothing but a collection of appearances in the mind, united according to the supposed necessities of thought, is really to discourage experience and bid imagination riot. For in the critical philosophy of Kant we have suggested a science which is higher than the sciences, a set of principles upon which they depend, and from which might possibly be deduced by the mere operation of thought all that is essential to their content. We have also suggested a method of inquiry which is no longer based on experimental observation and generalization, but which is controlled by principles supposed to be purely *a priori,* and thus more fundamental than experience itself. Metaphysics, by entering that supposed region of purer insight, cut itself off from all helpful competition and coördination with the rest of knowledge. It begot those great systems of idealistic philosophy which Professor Santayana has characterized as "visionary insolence." It produced that lamentable conflict between science and metaphysics which was so characteristic of the last century. No department of knowledge can thrive in isolation. If metaphysics, by arrogating to itself supremacy, tended to become visionary, the sciences also, despising metaphysical insight, tended to become disorganized and illiberal.

Happily in our own day there are many signs that this unfortunate antithesis between science and metaphysics is disappearing. Metaphysics itself, by a sort of inner evolution, has been working out to a more objective view of things. On the other hand, the sciences, through their own extension, have come upon unsuspected generalities and coördinations. Above all, the principle of evolution, which was early recognized in metaphysical theories, has served, by its general recognition in all departments of

knowledge, to restore unity among the sciences. It has forced idealism to recognize that even intelligence, the mind itself, has had a natural history. Metaphysics is thus leaving its position of isolation, and returning to its ancient place as a science coördinated with the rest of knowledge.

But it returns not without modification and not without its own interest in evolutionary theory. It will still, as of old, seek to discover the basal types of existence and their general modes of operation. It will still ask, What can we say of existence as a whole which is true of it? But it has learned from idealism that while it may view intelligence as the instrument of knowledge, it may not hope to understand nature as a process if the place of intelligence in that process is disregarded. For to reconstruct in thought the world's vanished past and to forecast its possible future is to give to intelligence a certain baffling and perplexing importance in the scheme of things. In attacking this problem of the place of intelligence in an evolving world, metaphysics may not, however, boast that it has a method peculiarly its own. It may not hope to control the inquiry by principles supposed to be derived from pure reason and thus to have a higher warrant than the principles employed in other sciences. For metaphysics has come to believe in the evolution of intelligence because it has been so taught by the method of experimental investigation. It can not, therefore, discredit that method without discrediting its own belief.

We may, indeed, be at first bewildered by the fact that the world in which intelligence has evolved is the world which intelligence has discovered; but if we accept the discovery, we do but recognize in intelligence a natural good whose use and final cause is to make us somewhat acquainted with our dwelling-place. The world thus exists as just what we have discovered it to be, the place in which

intelligence has dawned and led to a knowledge of the process in which such a great event has happened. It is natural, therefore, to claim that in reflecting on our world we may largely disregard the fact that we reflect. Realizing that in him has arisen intelligence, knowledge, understanding of the world, as the stoutest weapon in his life's warfare, man realizes that his weapon is for use rather than for scrutiny. Its excellence is to be tested by the territory won, and not by inquisitive feeling of the sharpness of the blade—especially when that blade sharpens only with its conquering use. Thus, as I say, we may largely disregard the fact that we reflect. By so doing, the world grows to clearness as the thing reflected on. Its laws and processes take shape in useful formulas. It is thus that the sciences advance to their great contributions. And why not, then, metaphysics? Why should we rather hope that by making the mind itself exclusively the object of our study, an added clearness will be given to the scheme of things?

But we can never wholly disregard the fact that we reflect, because the dawn of intelligence in the world is an event of too great interest to be accepted merely as a matter of record. If we are warranted in regarding it as a natural good whose use is to acquaint us with the world, we are, doubtless, also warranted in regarding it as the situation in which the world's evolution is most clearly and effectively revealed. If, now, we interpret this situation as differing from all others only by the fact that in it we have immediate knowledge of what it is to be an evolution, we attain a suggestive basis for generalization. From it we find little warrant to conclude that the present is simply the unfolding of a past, possibly of a very remote past, or that the future is simply the present unfolded. Evolution appears to be a process of a totally different sort. It appears to be always and eternally the unfolding of an effective present. Behind it, it leaves the past as the record

of what it has done, the totality of things accomplished, but not the promise and potency of things to be. It is a dead past. As such it may be conditioning; but it is not effective, because it is accomplished. To the present alone belong the riches of potentiality and spontaneity; to it alone belongs efficiency. We are, thus, under no obligation to seek in endless regress through the past the source of the world's becoming or the secret of its variety and human interest.

If such an interpretation of evolution is warranted, that process may indeed be described as having purpose. Only we may not understand by purpose some anciently conceived plan which the world was intended to follow. We should not invoke foresight, but should recognize historical continuity. For when we have a process going on in such a manner that the present of it is continually transforming itself into the record of what it has done, writing, as it were, a cosmic history, then, surely, we have a purpose. Such a process can be comprehended only as one having meaning and significance. Its factors are bound together not only as cause and effect, but also as means and end. Shed intelligence upon any of its events, and the question, Why? will leap into being with its insistent demands. The question sends us searching through the records of the past and the promise of the future in order that the event may be estimated at its proper value. Only by such searching may we hope to discover what the world's purpose is. We may call it, in one word, achievement. And I must believe, just because achievement is wrought through an effective present, that the world, as it passes from moment to moment of its existence, carries ever with it perennial sources of outlook and novelty. And I must believe, too, that just in proportion as we free ourselves from the desperate notion that somewhere and somehow hope and outlook have been, once for all, fixed unalterably for the

world's future, we shall then find in our union with nature a source of genuine enthusiasm.

Yes, we can not wholly disregard the fact that we reflect. We must note that the knowledge of the evolution of intelligence is itself a product of intelligence. Thus taking note, we may discover in the evolution of intelligence, not only the world grown to the highest point of varied and efficient action that we know, but evolution itself disclosed for what it is in its essential nature. It is the ceaseless unfolding of an effective present which carries with it the sources of what it achieves, and whose achievements have the value they disclose as discovered factors in the universal history of the world.

COLUMBIA UNIVERSITY PRESS

A SERIES of twenty-two lectures descriptive in untechnical language of the achievements in Science, Philosophy and Art, and indicating the present status of these subjects as concepts of human knowledge, are being delivered at Columbia University, during the academic year 1907–1908, by various professors chosen to represent the several departments of instruction.

MATHEMATICS, by Cassius Jackson Keyser, *Adrain Professor of Mathematics.*
PHYSICS, by Ernest Fox Nichols, *Professor of Experimental Physics.*
CHEMISTRY, by Charles F. Chandler, *Professor of Chemistry.*
ASTRONOMY, by Harold Jacoby, *Rutherfurd Professor of Astronomy.*
GEOLOGY, by James Furman Kemp, *Professor of Geology.*
BIOLOGY, by Edmund B. Wilson, *Professor of Zoology.*
PHYSIOLOGY, by Frederic S. Lee, *Professor of Physiology.*
BOTANY, by Herbert Maule Richards, *Professor of Botany.*
ZOOLOGY, by Henry E. Crampton, *Professor of Zoology.*
ANTHROPOLOGY, by Franz Boas, *Professor of Anthropology.*
ARCHAEOLOGY, by James Rignall Wheeler, *Professor of Greek Archaeology and Art.*
HISTORY, by James Harvey Robinson, *Professor of History.*
ECONOMICS, by Henry Rogers Seager, *Professor of Political Economy.*
POLITICS, by Charles A. Beard, *Adjunct Professor of Politics.*
JURISPRUDENCE, by Munroe Smith, *Professor of Roman Law and Comparative Jurisprudence.*
SOCIOLOGY, by Franklin Henry Giddings, *Professor of Sociology.*
PHILOSOPHY, by Nicholas Murray Butler, *President of the University.*
PSYCHOLOGY, by Robert S. Woodworth, *Adjunct Professor of Psychology.*
METAPHYSICS, by Frederick J. E. Woodbridge, *Johnsonian Professor of Philosophy.*
ETHICS, by John Dewey, *Professor of Philosophy.*
PHILOLOGY, by A. V. W. Jackson, *Professor of Indo-Iranian Languages.*
LITERATURE, by Harry Thurston Peck, *Anthon Professor of the Latin Language and Literature.*

These lectures are published by the Columbia University Press separately in pamphlet form, at the uniform price of twenty-five cents, by mail twenty-eight cents. Orders will be taken for the separate pamphlets, or for the whole series.

Address

THE COLUMBIA UNIVERSITY PRESS

Columbia University, New York

UNIVERSITY LIBRARIES

COLUMBIA UNIVERSITY
0025987305

APR 13 1948

110
W85